

WHAT WE CLAIM ARE:

1. A probe head comprising:

a table having a flat slide plane;

a plurality of slide units each having a slide surface for sliding on

5 said flat slide plane;

a lift unit provided for each of said slide units, said lift unit being capable of moving along a vertical direction;

probes provided for each of said lift units, a top end of each of said probes protruding from said lift unit; and

10 positioning means for positioning said lift unit relative to said slide unit and said slide unit relative to said table.

2. The probe head according to claim 1, wherein said lift unit comprises a movable unit movable along the vertical direction relative to said slide surface

15 and a support unit fixed to said movable unit and disposed with said probes.

3. The probe head according to claim 1, wherein:

said lift unit comprises a movable unit integrally formed with said slide unit and having one end connected to said slide unit and another end

20 made as a free end, and a support unit fixed to said movable unit and disposed with said probes; and

said positioning means includes a screw threaded into said slide unit for moving said movable unit along a direction extending remote from said slide surface and along a direction extending near to said slide surface.

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4. The probe head according to claim 1, wherein:

said lift unit comprises a movable unit supported pivotally by said slide unit and a support unit fixed to said movable unit and disposed with said probes; and

said positioning means includes a screw threaded into said slide  
5 unit for moving said movable unit along a direction extending remote from said slide surface and along a direction extending near to said slide surface.

5. The probe head according to claim 1, wherein said slide unit includes guide means for guiding said lift unit slidably along a direction inclined relative to said  
10 slide surface.

6. The probe head according to claim 5, wherein said lift unit comprises a movable unit for sliding along the direction inclined relative to said slide surface by being guided by said guiding means, a support unit disposed with said  
15 probes and an engagement unit for detachably engaging said support unit with said movable unit.

7. The probe head according to claim 1, further comprising an elastic member interposed between said lift unit and said slide unit, wherein said positioning  
20 means includes a screw threaded into said lift unit and said slide unit.

8. The probe head according to claim 1, wherein said table is fixed to a printed circuit board to be electrically connected to said probes.

25 9. An assembly method for the probe head recited in claim 1, comprising the steps of:

moving said lift unit along the vertical direction relative to said slide surface to determine a position of said lift unit relative to said slide unit; and

sliding said slide unit on said flat slide plane to determine a position of said slide unit relative to said table.

10. A probe card comprising:

a printed circuit board;  
a support unit whose position is determined relative to said printed circuit board;  
probes held by said support unit;  
adjusting means for adjusting a position or posture of said support unit relative to said printed circuit board; and  
wires electrically connecting said probes to electrodes of said printed circuit board.

11. A probe card comprising:

a printed circuit board;  
a support unit whose position is determined relative to said printed circuit board;  
probes held by said support unit;  
adjusting means for adjusting a position or posture of said support unit relative to said printed circuit board; and  
a flexible printed circuit board having flying leads whose top ends are connected to said probes or electrodes of said printed circuit board, said flexible printed circuit board electrically connecting said probes and the

electrodes of said printed circuit board.